

to the water course along its western limits, where altitudes of 500 to 600 feet are encountered. The upland soils of this region are sandy loams, rarely stiff, moderately fine and even grained. To the north of the Neuse river loams and loose loams are the more frequent upland soils and the growth is loblolly pine (North Carolina pine*), with a subordinate growth of small oaks; while to the south of this river the upland soils are more sandy and the forests are of long-leaf pine, often to the exclusion of almost every other tree, but near the streams and larger swamps there are belts of loams having for the chief growth loblolly pines, often of a large size (rosemary and slash pines†). The lowlands, which are either narrow strips of alluvium contiguous to the streams or, in the vicinity of the coast, are large and poorly-drained basins, have soils that are silty and clayey and compact, or sandy and loose with a large percentage of organic constituents. Where the soil is mellow throughout the year the lowlands have forests of loblolly pine, which is the tree of chief commercial value, mixed with many kinds of hardwoods, particularly ash, maple and gums. If the soil is more compact, the growth is chiefly oaks-water, willow, Spanish, swamp, white and overcup oaks, with elms and some gums. Where the soil is wet through a large part of the year, the largest sweet and black gums are to be found, and where flooded for a considerable part of the year the finest cypress occur, in places to the exclusion of other large trees. On peaty soils or sandy soils underlaid with marl occur white cedar and various bays forming "cedar" or "juniper bays." The lowlands form a large part of the timber yielding lands of this section of the State.

The Piedmont forest region, which extends westward from the Coastal region to the foot of the Blue Ridge has a surface varying from gently rolling to rugged and broken near the larger streams, along most of which are narrow strips of alluvium. The upland soils vary from sandy and loose loams, superficially so at any rate, to stiff and rarely clayey loams, and are characterized by forests of hardwoods, particularly of oaks, hickories and dogwood, mixed with the short-leaf pine. There are occasional belts of hardwoods containing no pine, as the one which passes through Orange, Alamance, Granville and Person counties; the belt of magnificent oaks and hickories passing from Greensboro southwest to Charlotte; and the similar belts in the western parts of Lincoln and Catawba counties. In a few places, as in the southern parts of Union county and in parts of Durham county, there is much more pine than oak in the forest, the post oak,

*Lumbermen's name.

†Local name.